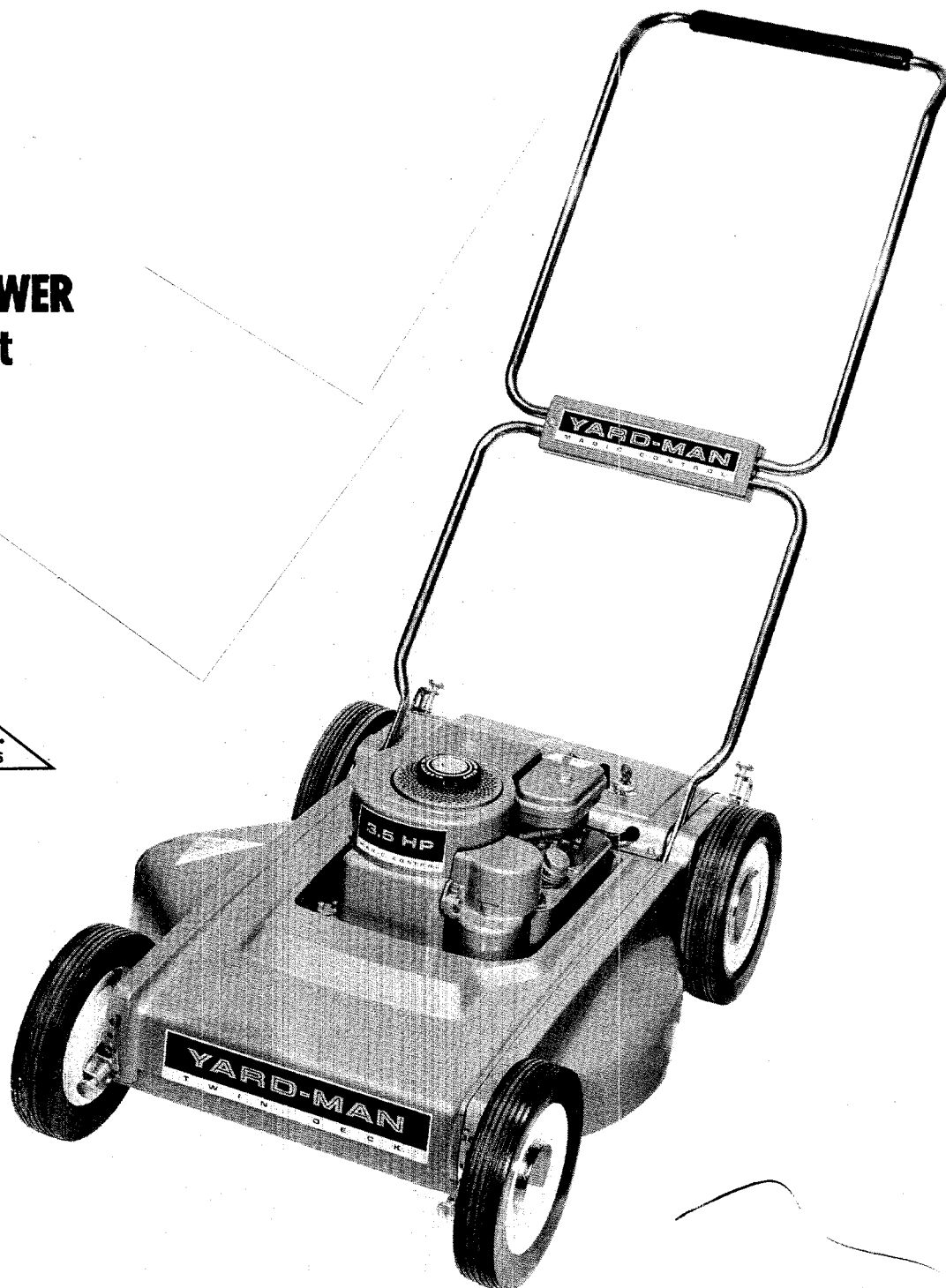


**OWNERS**

# **OPERATING MANUAL**

**and PARTS LIST**

**MODEL  
2310-1  
22 INCH  
ROTARY MOWER  
Electric Start**



0611-553

PRINTED IN U.S.A.

## **YARD-MAN INC**

Jackson Michigan

BUILDERS OF THE ORIGINAL SILENT YARD-MAN LAWN MOWER

## RULES FOR SAFE OPERATION

Your rotary is a precision piece of power equipment, engineering skill and experience have been combined to provide the ultimate in safety and efficiency. However, as with any type of power equipment, carelessness or error on the part of the operator can result in injury. Therefore, exercise extreme caution at all times.

1. **KNOW YOUR MACHINE** Read the Owner's Manual carefully - learn how to operate your mower properly.
2. **MAKE SURE THE LAWN IS CLEAR** of sticks, stones, wire and other hazardous items from lawn before mowing. Such items are dangerous to both the mower and individuals in the vicinity of the mower.
3. **ADD FUEL** before starting engine - - - never when engine is hot or running.
4. **ALWAYS STOP ENGINE** turn off switch or disconnect sparkplug wire before attempting any repairs or adjustments.
- ✓ 5. **START ENGINE CAREFULLY** always stand at side opposite discharge chute (when using auxiliary rope start) **NEVER PLACE HANDS OR FEET UNDER THE MOWER OR NEAR THE DISCHARGE CHUTE WHILE THE ENGINE IS RUNNING.**
6. **DO NOT TILT MOWER** at extreme angle while engine is running. Cut grass on hills and banks sideways.
- ✓ 7. **STOP THE ENGINE** when not cutting grass.
8. **DO NOT ALLOW MINORS** to operate mower unless thoroughly instructed and properly supervised.
9. **KEEP CHILDREN AND PETS AWAY** from area at all times during mowing operation.
10. **DISENGAGE ALL BLADE AND DRIVE CLUTCHES** before starting units so equipped. Do not attempt to start engine while mower is resting in high grass.
- ✓ 11. **ALWAYS REMOVE KEY** from switch when leaving your mower unattended or when mower is not in use.

### **LAWN CARE:**

1. It is not advisable to cut off more than 1/3 of the total length of the grass at any one mowing.
2. When mowing thick, lush wet grass, start at outside of lawn and mow in counter-clockwise direction to prevent mower from recutting clippings from previous rounds.
3. When mowing thin or dry grass, start at outside of lawn and mow in clockwise direction to progressively discharge clippings to center of lawn where they can easily be removed.
4. Recommended normal cutting heights for different types of grass:

1½ to 2½ — Med. to Med. High	Marion blue grass
1½ to 2½ — Med. to Med. High	Kentucky blue grass
1 to 2 — Med. - Low to Med.	Fescues
1 to 2 — Med. - Low to Med.	Rye grass
1 to 1½ — Low to Med. Low.	Bermuda
1 to 1½ — Low to Med. Low.	Zoysia
1 to 2 — Med. - Low to Med.	Bent grass

## **SUGGESTIONS FOR MORE EFFICIENT, AND MAINTENANCE-FREE OPERATION**

### **GENERAL MOWING:**

1. Always keep mower blade "Knife" sharp and balanced for maximum cutting efficiency.
2. Always start engine with mower on level surface where blade will not drag on tall grass or other obstructions. After starting, let engine warm up several minutes at slow speed before starting to mow.
3. When mowing under normal conditions, run mower at  $\frac{1}{2}$  to  $\frac{3}{4}$  throttle for best results.
4. When cutting tall heavy growth, or on rough ground, place mower in highest cut position and gradually reduce to desired cutting height over course of two or three mowings.

### **USING GRASS CATCHER:**

1. When using grass catcher, operate mower engine at  $\frac{3}{4}$  to full throttle.
2. In heavy dense turf, set cutting height in medium to high position.
3. Allow wet grass to dry before attempting to mow with grass catcher attached.
4. Empty catcher bag thoroughly before storage.

### **MAINTENANCE**

Your mower like all machines with moving parts must receive care and maintenance. The following tips, if used, will contribute many trouble-free hours to your mower.

1. Check oil level frequently. When changing oil, make sure dirt and debris cleaned off oil sump before removing oil plug.
2. Keep mower clean, especially the engine well and underside of mower housing.
3. Check all nuts, bolts and screws occasionally to be sure mower is in good operating condition.
4. Should excessive vibration develop, check your blade and crankshaft immediately. Do not operate mower with an unbalanced blade, a damaged blade or a damaged crankshaft.
5. The wheel bearings are pre-lubricated at the factory and should require no further attention until mower is serviced. However, it is advisable to remove the wheels and apply a small amount of light oil to each axle, at least once a season.
6. If you are going to store your mower for any length of time (30 days or longer) it is important that the following steps be taken:
  - a. Drain the gas tank and carburetor. Allow the engine to run out of gas, gasoline left in the engine will leave gum deposits in the carburetor and gas tank.
  - b. Clean engine of all foreign matter.
  - c. Lubricate cylinder by removing the spark plug and pouring one ounce of clean lubricating oil through the spark plug hole into the cylinder, Crank engine slowly to spread oil and replace spark plug.
7. Just as your automobile needs professional mechanical maintenance from time to time, so does your air cooled engine. A yearly tune-up and check by a qualified service center is recommended to avoid breakdowns and unnecessary delays during the cutting season.

### **BATTERY CARE:**

Your Yard-Man mower is equipped with a Briggs & Stratton battery starting system. The battery must be charged before initial use and continually thereafter.

A new battery is not fully charged when shipped and should be charged 20 to 24 hours before use. However, a 6 to 12 hour initial charge will permit a limited number of starts.

## BEFORE STARTING ENGINE

1. Remove OIL FILLER PLUG, fill crankcase with 1-1/4 pints of S.A.E. No. 30 oil. Replace oil filler plug and tighten securely.
2. Fill tank with a good grade of regular, clean, fresh gasoline. DO NOT MIX OIL WITH GASOLINE. FOR COMPLETE ENGINE INFORMATION, READ ENGINE INSTRUCTION BOOKLET FURNISHED WITH YOUR MOWER BEFORE STARTING OR OPERATING.

## TO START ENGINE:

1. Move throttle control to start position or midway in run position.
2. Turn key to start position and hold until the engine starts—then release.
3. When engine starts, move throttle control knob to run position (slow speed) until engine warms up.

**IMPORTANT:** If engine floods, place throttle control knob in "Start" position and turn the engine over for about four or five seconds. Then reposition control lever to "Run" position and start engine.

Engine flooding is usually caused by a dirty air cleaner. Service air cleaner regularly as noted in engine operation and maintenance instruction.

If engine continues to flood even with a clean air filter, lean carburetor adjustment screw 1/8 turn (See engine instructions)

## NOTE:

To stop the engine, turn key to "OFF" position. The engine may also be stopped by moving throttle control to "STOP" position.

**For further information and instructions on operation and maintenance of the electric start, read the instructions supplied by the manufacturer.**

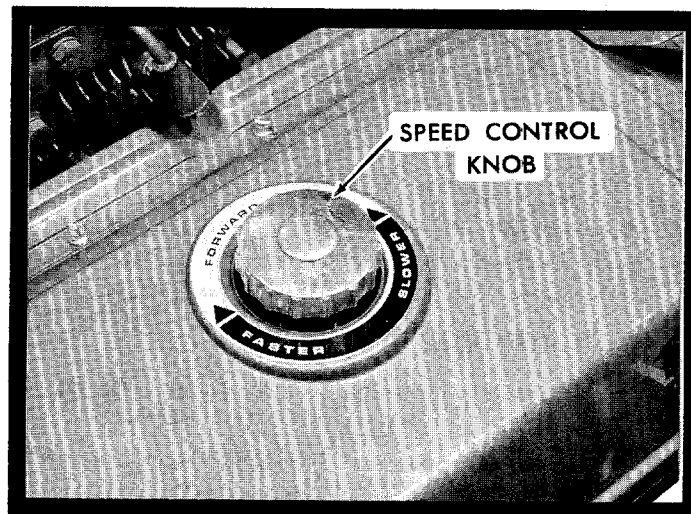
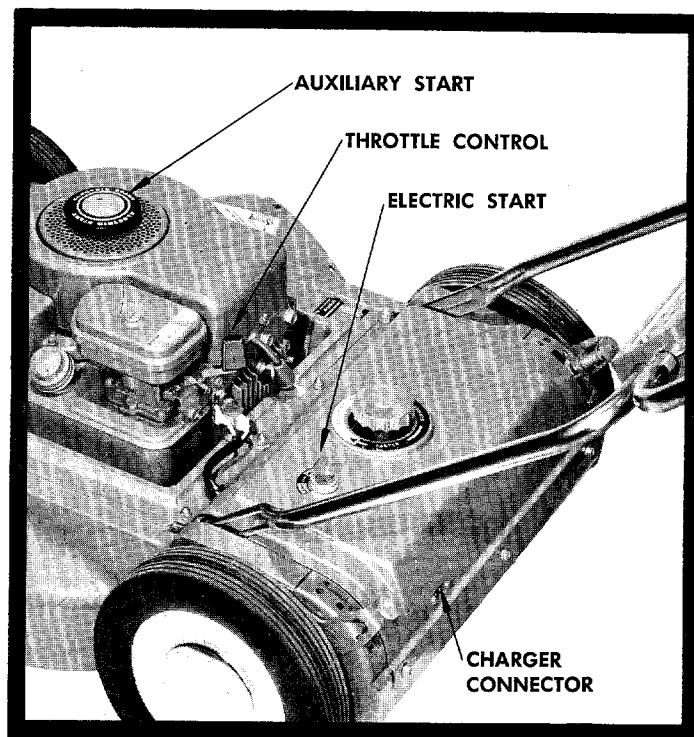
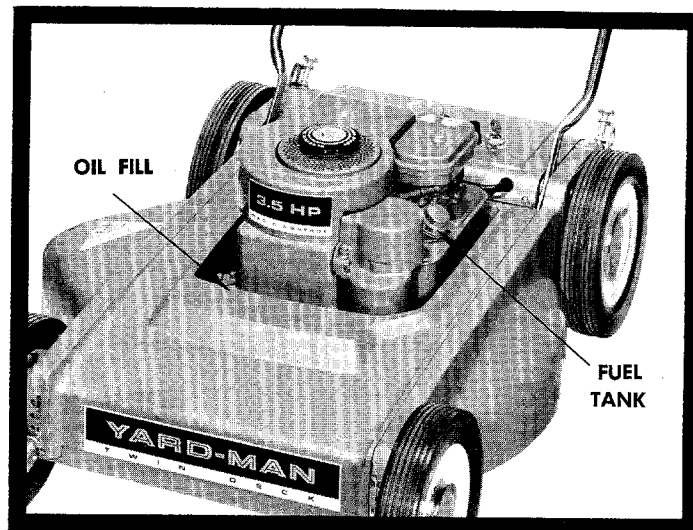
## OPERATING INSTRUCTIONS

**CAUTION:** The mower blade is turning whenever engine is running. BE SURE TO STOP ENGINE, and disconnect spark plug wire, before attempting adjustments.

TO PROPEL MOWER FORWARD, simply raise the handle . . . TO STOP MOWER, lower the handle.

## SPEED CONTROL

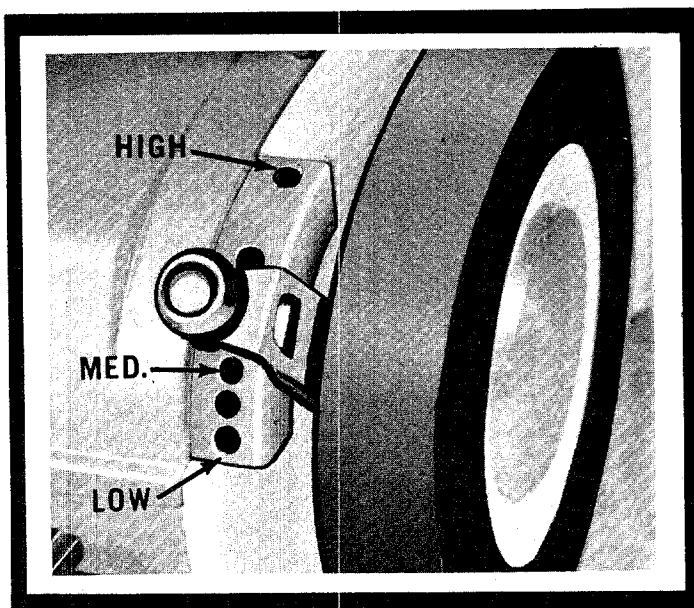
The forward speed of your mower can be adjusted as desired. To adjust speed, lower the handle to stop mower and turn speed control knob CLOCKWISE for faster speed or COUNTER-CLOCKWISE for slower speed.



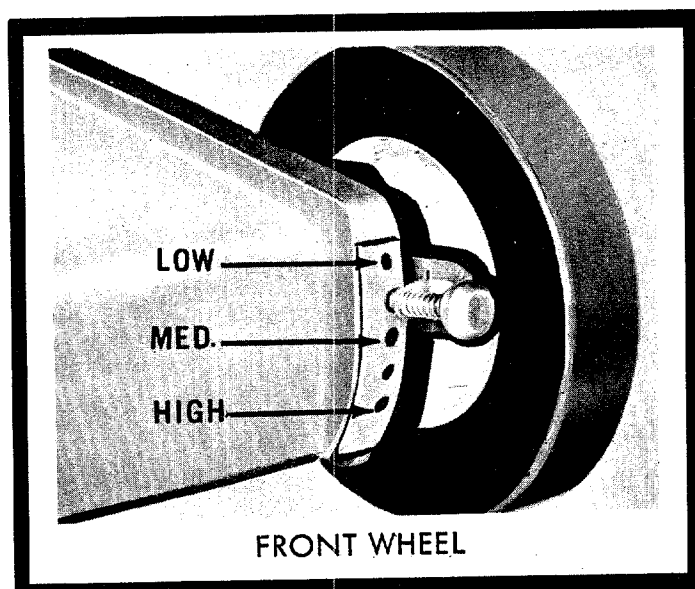
## HEIGHT OF CUT ADJUSTMENT

The cutting height of your mower can easily be adjusted from low to high cut. **DO NOT MAKE ADJUSTMENTS WITH ENGINE RUNNING.**

1. Pull out plungers on rear wheel adjust levers and move levers **UP** for higher cut, or **DOWN** for lower cut as shown and release plungers. Be sure plungers are firmly seated in adjustment holes.

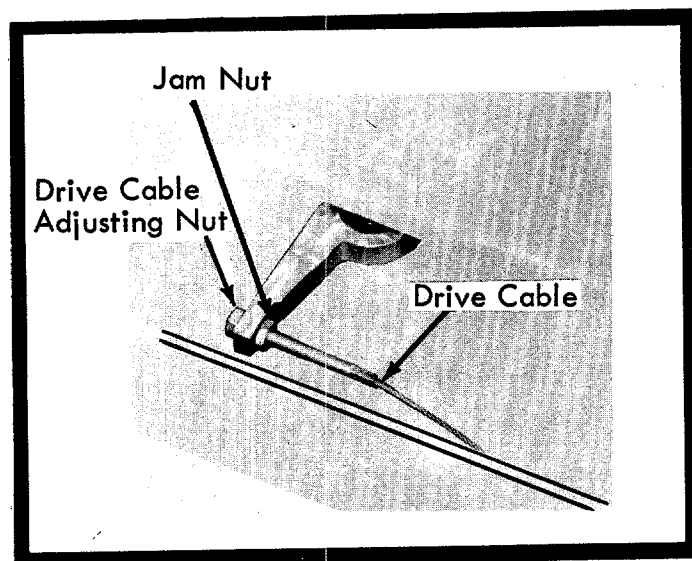


2. Pull out plungers on front wheel adjust levers and move levers **DOWN** for higher cut or **UP** for lower cut as shown and release plungers. Be sure plungers are firmly seated in adjustment holes.



## TO ADJUST PROPELLING UNIT

As propelling unit "wears-in" it is possible that handle may have to be lifted higher to engage propelling unit. To reduce the amount of handle travel required remove rear cover from propelling unit at rear of mower and turn drive cable adjusting nut **COUNTER-CLOCKWISE** 1 or 2 turns. Then tighten jam nut by turning **CLOCKWISE** to lock adjustment securely.



## LUBRICATION AND MAINTENANCE

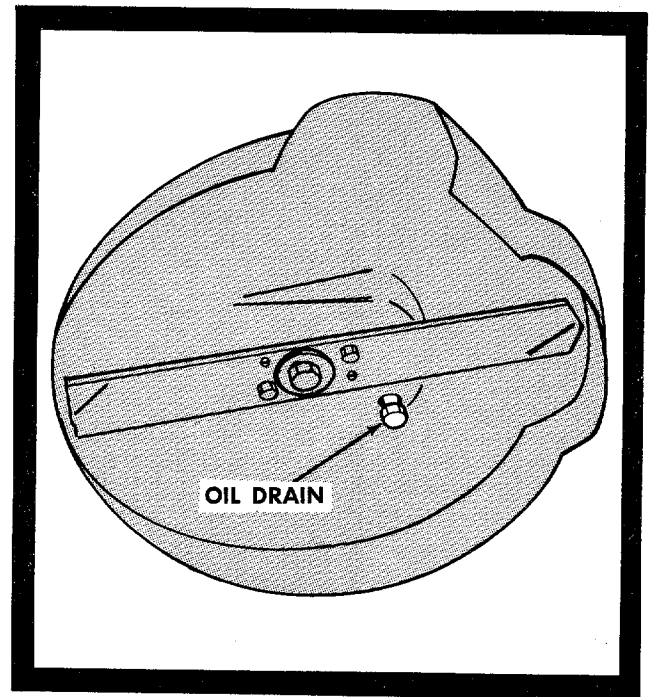
All wheel bearings are pre-lubricated at the factory and require no further attention until mower is serviced.

Engine oil should be changed after the first 5 hours of operation and each 20 hours of operation thereafter.

2. The air cleaner protects the engine against grit and dirt. Extremely dirty air cleaner element may cause engine to stall. SEE ENGINE INSTRUCTION MANUAL FOR PROPER AIR CLEANER MAINTENANCE.

### TO CHANGE OIL

Drain oil while engine is warm. Disconnect spark plug wire and secure at least 1" away from spark plug. Block right hand side of mower up about 4" high and set shallow one quart pan beneath oil drain. Remove cap from end of drain pipe and allow oil to drain completely. Replace cap on drain pipe, tighten securely and refill with 1 1/4 pints S.A.E. #30 oil.

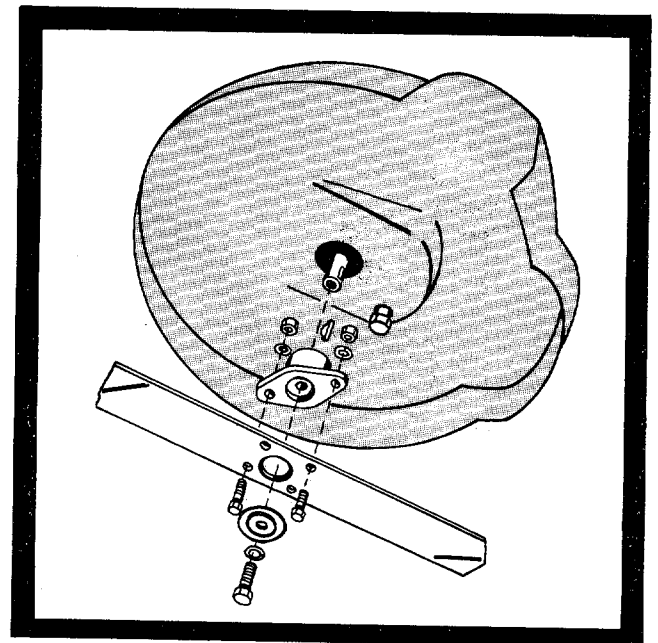


### TO REPLACE BLADE

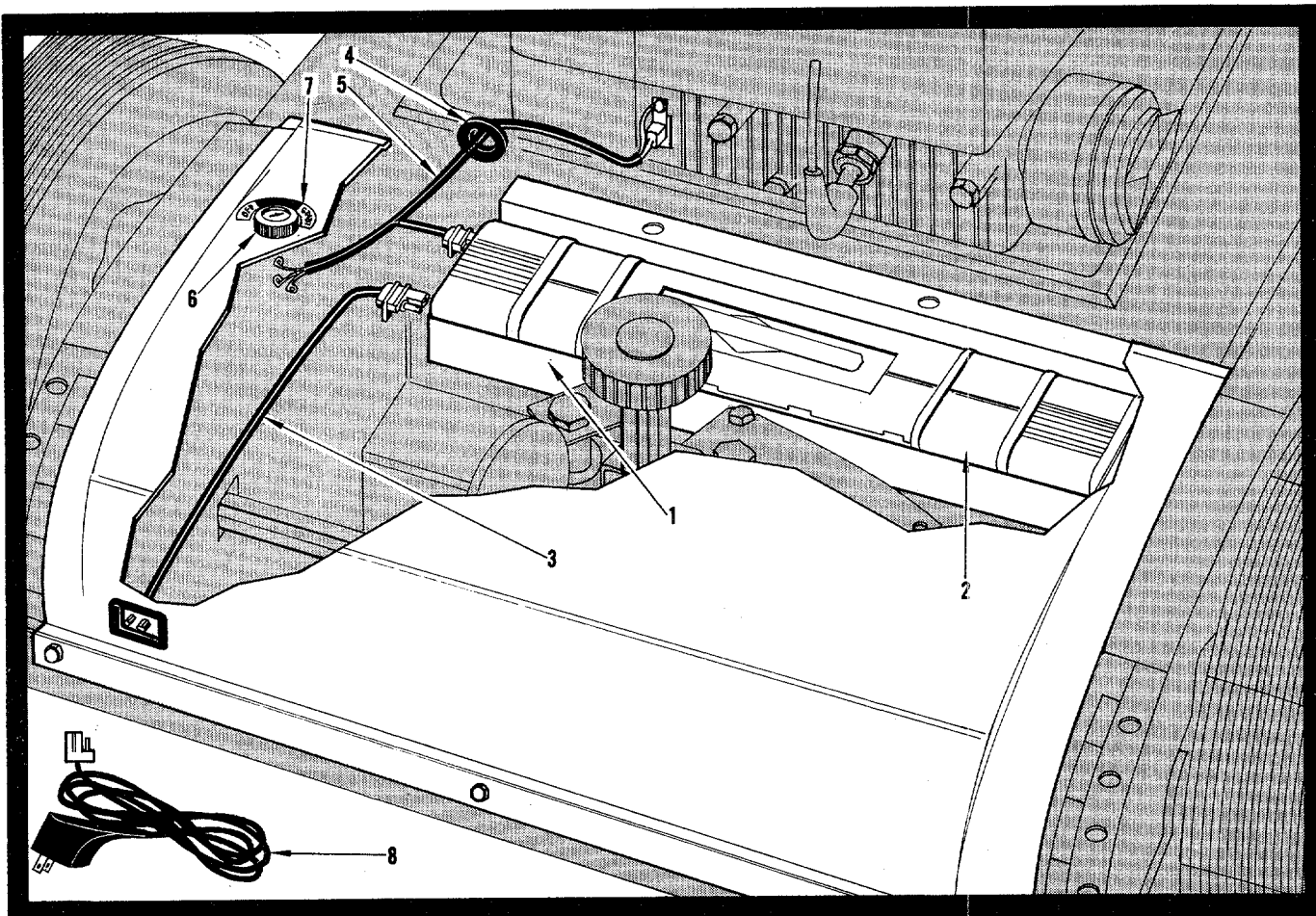
1. Be sure engine is stopped, disconnect spark plug wire and secure at least 1" away from spark plug.
2. Tip mower with carburetor side down.
3. Remove blade bolts and washers.
4. Remove blade and replace with a new one.
5. Sharpen dull blade maintaining proper balance.

### BREAK-IN PERIOD

1. During first 10 hours of operation check frequently the following:
  1. OIL LEVEL IN ENGINE CRANKCASE
  2. ALL BOLTS, NUTS AND SCREWS FOR TIGHTNESS

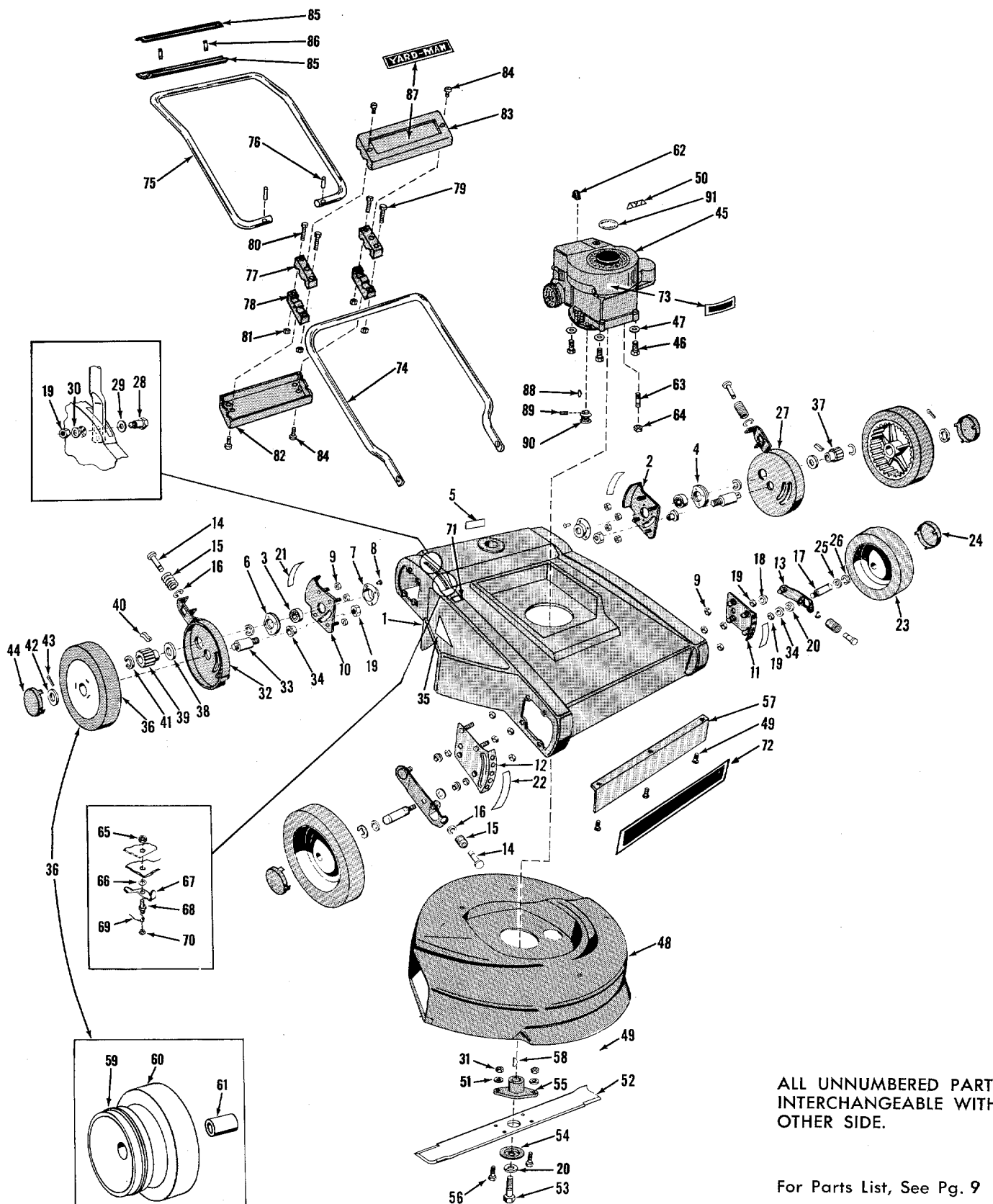






## PARTS LIST ELECTRIC START COMPONENTS

REF. NO.	PART NO.	NAME OF PART	REF. NO.	PART NO.	NAME OF PART
1	2609-346-17	Bracket—Battery Retaining .....	6	2160-11	Ass'y—Switch .....
2		Battery—B & S No. 390123 .....	7	1616-373	Label—Starter Switch .....
3	1188-12	Ass'y—Charger Cord (Extension) ..	8		Ass'y—Battery Charger—
4	1657-44	Bushing—Wire Harness Loom .....			B & S No. 390197 .....
5	2188-9	Ass'y—Wire Harness .....			



ALL UNNUMBERED PARTS  
INTERCHANGEABLE WITH  
OTHER SIDE.

For Parts List, See Pg. 9



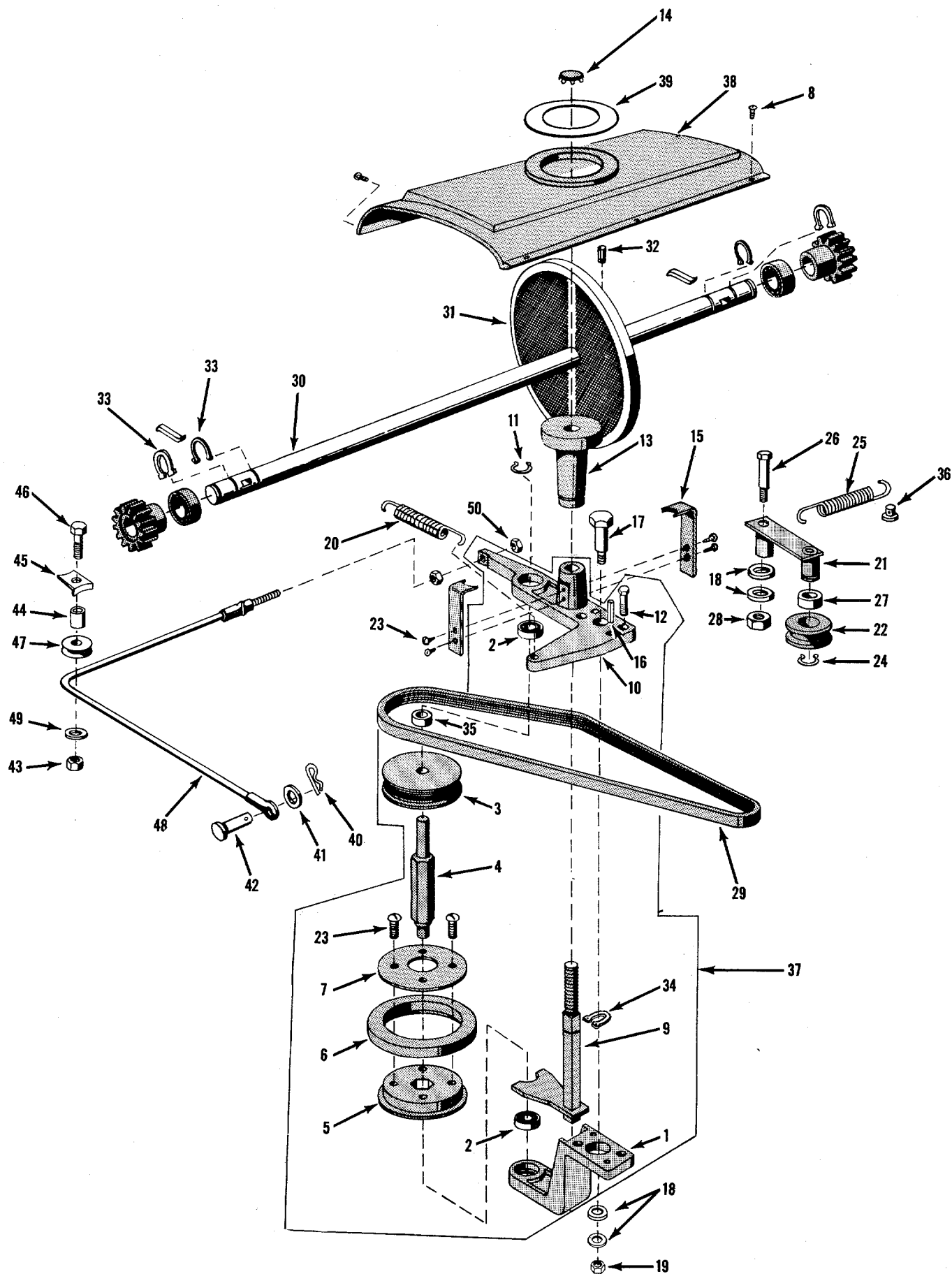
# PARTS LIST

## MODEL 2310-1

Your Mower is Right Hand (R.H.) or Left Hand (L.H.) as you Mow

REF. NO.	PART NO.	NAME OF PART	REF. NO.	PART NO.	NAME OF PART
1	6601-130-17	Housing Blade	48	2162-10-17	Assembly—Grass Baffle
2	2111-69-17	Assembly Plate—L.H.	49	1511-31	*Screw (#10-16 x 3/8)
3	1652-13	Bearing—Rear Drive	50	1616-255	Label—Throttle Control
4	1182-5	Ass'y—Retainer & Spacer L.H.	51	1018	*Lock Washer
5	1605-437	Plate—Name	52	3604-40	Blade
6	1182-4	Ass'y—Retainer & Spacer R.H.	53	1509-101	*Bolt—Blade Retainer (1/4-20 x 3/4)
7	1629-50	Retainer—Bearing	54	1543-39	Washer—Blade Drive
8	1530-20	Rivet (3/16 dia. x 13/32)	55	1143-5	Ass'y—Blade Adapter
9	1539-52	*Nut (1/4-20 Special)	56	1509-34	*Bolt—Blade Retainer (1/4-20 x 3/4)
10	2111-70-17	Assembly Plate R.H.	57	2602-28-17	Comb—Front
11	2111-71-17	Assembly Plate L.H.	58	1646-8	Key
12	2111-72-17	Assembly Plate R.H.	59	1110-27-41	Wheel & Bearings Less Tire
13	1113-30-17	Plate—Wheel Adjusting	60	2619-25	Tire
14	1547-9	Pin—Adjusting	61	1652-52	Bearing
15	1642-18	Spring—Pin Actuating	62	2643-28	Knob—Throttle Control
16	1650-10	Ring—Retaining	63	1745-6	Pipe—Oil Drain
17	1631-5	Axle—Wheel	64	1674-34	Cap—Oil Drain Pipe
18	1657-10	Bushing—Pivot	65	1537-3	Nut (1/4-20 Acorn)
19	41-028	*Nut (5/16-24 Hex Hd.)	66	1540-23	*Washer (1/4 x 5/8 x 1/16)
20	1542-8	Washer—Lock (3/8 Split)	67	1609-262	Bracket—Up Stop
21	1616-194	Label—Height Adjusting Rear	68	1513-60	Bolt—Shoulder
22	1616-193	Label—Height Adjusting Front	69	1642-75	Spring
23	1108-113-41	Assembly Wheel & Tire—Front	70	1650-31	Retaining Ring
24	2674-32	Hub Cap—Front	71	1616-230	Label—Handle Latch
25	39-012	*Washer—Axle (1/2 x 1" x .058)	72	2616-252	Label—Yard-man
26	1650-1	Ring	73	1616-254	Label—Engine
27	2118-23-17	Assembly—Housing L.H.	74	3712-59-01	Handle—Lower
28	1513-54	Shoulder Bolt	75	3712-57-01	Handle—Upper
29	1552-9	Washer Wave	76	1548-5	Rollpin
30	159	*Washer (5/16 x 5/8 x 1/16)	77	2609-316	Bracket—Handle Front
31	1538-8	Nut (1/4-20 Hex Lock)	78	2609-317	Bracket—Handle Rear
32	2118-22-17	Assembly—Housing R.H.	79	1509-41	*Bolt (5/16-18 x 1 1/4 Hex Hd.)
33	1631-26	Axle—Wheel	80	1509-50	*Bolt (5/16-18 x 1 3/4 Hex Hd.)
34	1657-7	Bushing	81	1538-25	*Nut (5/16-18 Hex Lock)
35	1616-242	Label—Caution	82	3622-93-17	Cover—Handle Rear
36	1108-80-41	Assembly Wheel & Tire—Rear	83	3622-90-17	Cover—Handle Front
37	425	Pinion—L.H.	84	1117	*Screw (#10-32 x 3/8 Rd. Hd.)
38	109	Washer—Felt	85	2710-40	Grip—Handle
39	428	Pinion—R.H.	86	1547-35	Pin—Grip Retaining
40	323	Pawl	87	2616-284	Label—Handle Cover
41	1650-21	Ring—Retaining	88	1009	Key
42	141	*Washer (3/8 x 1 1/4 x #16)	89	1508-20	Screw—Set (1/4-20)
43	142	*Cotter Pin (1/8 x 3/8)	90	1626-73	Pulley (Poly-V "J" Section)
44	2674-33	Hub Cap	91	1616-375	Label—Auxiliary Start
45		Ass'y—B & S Engine Model 92995 Type 0841-01		3104-6-17	Leaf Mulcher (Available as Accessory—@ \$1 ea.)
46	1513-96	Bolt (3/8-16 x 1 1/2 Hex Hd.)			
47	1076	*Washer—Lock (3/8)			

\*Standard Hardware Item—May Be Purchased Locally



## PARTS LIST

### MODEL 2310-1

Your Mower is Right Hand (R.H.) or Left Hand (L.H.) as you Mow

REF. NO.	PART NO.	NAME OF PART	REF. NO.	PART NO.	NAME OF PART
1	2678-18	Yoke—Lower .....	26	1513-58	Bolt—Shoulder (3/8-16 Hex.) .....
2	1652-64	Bearing .....	27	1652-49	Bearing—Idler Pulley .....
3	1626-59	Pulley—Poly-V "J" Section— Hex. Drive .....	28	1538-13	*Nut (3/8-16 Hex. Lock) .....
4	1632-111	Shaft—Ring Drive .....	29	1651-36	Belt—Poly-V ("J" Section) .....
5	1644-65	Hub—Friction Ring .....	30	2632-113	Shaft—Rear Wheel Drive .....
6	1067-12	Ring—Friction .....	31	2675-16	Disc—Friction Drive .....
7	1607-10	Ring—Retaining Friction Ring .....	32	1548-12	Pin—Disc to Drive Shaft .....
8	1511-31	*Screw (#10-16 x 7/16 "Sems") .....	33	1650-21	Ring—Shaft Retaining .....
9	1119-40	Assembly—Yoke & Shaft .....	34	1650-1	Ring—Retaining .....
10	3678-19	Yoke—Upper .....	35	1540-80	Washer—Spacer Upper .....
11	1650-32	Retaining Ring .....	36	1545-11	Clevis Pin .....
12	1509-74	*Bolt (1/4-20 x 7/8 Hex. Hd.) .....	37	1129-236	Ass'y—Friction Drive .....
13	1643-30	Knob—Speed Change .....	38	3622-103-17	Cover—Rear .....
14	1649-24	Plug—Button .....	39	1616-250	Label—Speed Control .....
15	1609-252	Bracket—Knob Retaining .....	40	1547-4	Hairpin (.047 x 37/64) .....
16	1548-21	Rollpin .....	41	1540-61	*Washer (.260 I.D. x 1/2) .....
17	1513-50	Bolt—Shoulder Yoke to Housing .....	42	1545-11	Clevis Pin—(1/4 x 1/2) .....
18	1540-85	*Washer (3/8 x 3/4 x 3/64) .....	43	1534-8	*Nut—(#10-32 Hex. Lock) .....
19	1538-13	*Nut (3/8-16 Hex. Lock) .....	44	1624-46	Spacer .....
20	1642-72	Spring—Yoke Actuating .....	45	1629-34	Retainer .....
21	1132-63	Assembly—Idler Bracket & Spacer .....	46	1509-85	*Bolt—(#10-32 x 3/4 Hex.) .....
22	1120-60	Pulley—Idler Pulley .....	47	1626-37	Pulley .....
23	1117	Screw (#10 x 7/16 "Sems") .....	48	2127-6	Assembly—Cable .....
24	1650-9	Ring—Retaining .....	49	1097	*Washer (3/16 x 7/16) .....
25	1642-71	Spring—Idler Tension .....	50	1534-1	*Nut—(#10-32) .....

\*Standard Hardware Items, May Be Purchased Locally

**When you own this - - YARD-MAN**

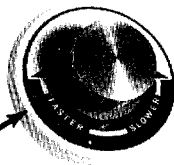
**22" ELECTRIC START ROTARY MOWER**

**you enjoy these outstanding features**



**QUICK SET HEIGHT  
ADJUSTMENT**

For fast selection of Hi, Med., Lo  
cutting heights

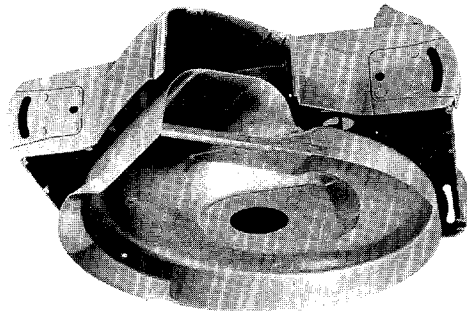


**DIAL YOUR  
SPEED**

Simply dial the mowing speed you want.  
Make your selection for the mowing condition  
up to 3 1/4 m.p.h.

**CLEAN-FLO DISCHARGE  
CHUTE FOR SAFETY BAG**

Vac-U-Lift blade cuts clean,  
smooth for finer discharge  
into full loading Safety  
Grass Bag.



**NEW TWIN/DECK  
SAFETY HOUSING**

Light weight Aluminum alloy housing  
protection with clean flow steel grass  
tunnel insert — result greater mowing  
performance.

**WARRANTY**

This YARD-MAN unit is guaranteed for one year from date of purchase (90 days when used commercially) against defects in workmanship or material under normal use and service.

We agree to repair or replace without charge to the purchaser, including labor, any part proven to be defective within the warranty period, except the Engine which is the responsibility of the Engine manufacturer.

Parts for this YARD-MAN unit will be available for at least ten years from the date of purchase. This warranty will not apply to a unit which has been subjected to—misuse, negligence, an accident, or to a unit which has been altered in any way.

**YARD-MAN INC**

JACKSON, MICHIGAN